

Notice of Allowability

Application No.

09/998,922

Examiner

Timothy J. Kugel

Applicant(s)

FOULGER ET AL.

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 30 November 2004.
2. ☒ The allowed claim(s) is/are 1-34.
3. ☒ The drawings filed on 30 November 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. Claims 1-32 are pending as amended 17 November 2004

Specification

2. Applicant's amendments to the specification have been entered. The examiner withdraws the objections to the specification noted in the prior Office action dated 24 August 2004.

Response to Arguments

3. Applicant's arguments with respect to claims 1-6, 8-15, 17-22 and 24-27 have been considered but are moot in view of the amended claims.

Claim Rejections - 35 USC § 103

4. Applicant's amendments to the claim 1-12, 19, and 28-34 see pages 3-7, filed 17 November 2004, have been entered. Said amendments have been fully considered and render the claims novel to the prior art. The rejections under 35 USC § 103(a) of claims 1-6, 8-15, 17-22 and 24-27 have been withdrawn.

Allowable Subject Matter

5. Claims 1-32 are allowed.
6. The following is an examiner's statement of reasons for allowance: U.S. Patent 6,097,530 (Asher et al. '530) and U.S. Patent 6,123,861 (Santini et al.) are the closest prior art. Asher et al '530 teach a composition and optical device comprising a crystalline colloidal array comprising ordered electrostatically stabilized polystyrene colloidal particles (Column 1 Lines 15-49) a polymer matrix encapsulating said colloidal particles (Column 10 Lines 11-23), including a crosslinking agent (Column 6 Lines 25-

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34), that exhibits a visible photonic bandgap that is capable of shifting upon environmental stimulation—specifically a change in temperature (Column 1 Lines 15-28). Santini et al. discloses the use of polyethyleneglycol like materials—including copolymers with methacrylate functionality—to ensure biological compatibility (Column 5 Lines 49-63). Neither Asher et al. '530 nor Santini et al. teach a polyethyleneglycol matrix polymer polymerized among the ordered particles of the crystalline colloidal array, nor do they teach a polyethylene glycol matrix polymer with an R3 selected from the group consisting of proteins, nucleotides and antibodies. Both Asher et al. '530 and Santini et al. are silent as to the molecular weight of the polyethyleneglycol matrix.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

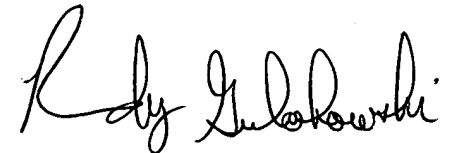
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached on 7:00 AM - 4:00 PM Monday - Friday.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Randy Gulakowski". The signature is fluid and cursive, with the first name "Randy" and last name "Gulakowski" clearly distinguishable.

RANDY GULAKOWSKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700